Herbert De Gersem

List of Publications by Year
in descending order

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216	1,876	279487	433756
papers	citations	23 h-index	31 g-index

221	221	221	1189
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Broadband finite-element impedance computation for parasitic extraction. Electrical Engineering, 2022, 104, 855-867.	1.2	4
2	Simulation Analysis of Critical Parameters for Thermal Stability of Surge Arresters. IEEE Transactions on Power Delivery, 2022, 37, 871-879.	2.9	5
3	Three-dimensional data-driven magnetostatic field computation using real-world measurement data. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2022, 41, 615-627.	0.5	3
4	Low-Frequency Stabilization for FEM Impedance Computation. IEEE Transactions on Electromagnetic Compatibility, 2022, 64, 750-759.	1.4	3
5	Hybrid modeling: towards the next level of scientific computing in engineering. Journal of Mathematics in Industry, 2022, 12, .	0.7	12
6	Quasi-3D Magneto-Thermal Quench Simulation Scheme for Superconducting Accelerator Magnets. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	1
7	High-Frequency Modeling of Delta- and Star-Connected Induction Motors. IEEE Transactions on Electromagnetic Compatibility, 2022, 64, 1533-1544.	1.4	5
8	Quasiâ€3D magnetic field simulation of superconducting devices with translational symmetry. IET Science, Measurement and Technology, 2021, 15, 319-327.	0.9	1
9	Towards Electrothermal Optimization of a HVDC Cable Joint Based on Field Simulation. Energies, 2021, 14, 2848.	1.6	7
10	Modeling Skew by Single- and Multi-Slice 2-D Machine Models. IEEE Transactions on Magnetics, 2021, 57, 1-4.	1.2	2
11	Pickup development for short low-charge bunches in x-ray free-electron lasers. Physical Review Accelerators and Beams, 2021, 24, .	0.6	1
12	Tensor-train approximation of the chemical master equation and its application for parameter inference. Journal of Chemical Physics, 2021, 155, 034102.	1.2	9
13	Quasi-3-D spectral wavelet method for a thermal quench simulation. Journal of Mathematics in Industry, 2021, 11, .	0.7	0
14	Data-driven electromagnetic field simulation with a material-model-free finite element solver. , 2021, , .		0
15	Mitigation of parasitic losses in the quadrupole resonator enabling direct measurements of low residual resistances of SRF samples. AIP Advances, 2021, 11, 125326.	0.6	1
16	Electroquasistatic quasiâ€3D finite element simulation of a graded surge arrester. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2020, 33, e2575.	1.2	5
17	A structural analysis of field/circuit coupled problems based on a generalised circuit element. Numerical Algorithms, 2020, 83, 373-394.	1.1	8
18	Coupled simulation of transient heat flow and electric currents in thin wires: Application to bond wires in microelectronic chip packaging. Computers and Mathematics With Applications, 2020, 79, 1781-1801.	1.4	2

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19	Highly Parallelized Contour Integral Method for Computing Resonant Modes of Lossy Cavities. IEEE Transactions on Magnetics, 2020, 56, 1-4.	1.2	1
20	Coupled Simulation of Current Flow and Residual Thermal Stress in ZnO Varistors. IEEE Transactions on Magnetics, 2020, 56, 1-4.	1.2	3
21	Magnetic Field Simulation With Data-Driven Material Modeling. IEEE Transactions on Magnetics, 2020, 56, 1-6.	1.2	14
22	Approximation and Uncertainty Quantification of Systems with Arbitrary Parameter Distributions Using Weighted Leja Interpolation. Algorithms, 2020, 13, 51.	1.2	3
23	Simulation of Transient Electrospray Dynamics in Conductive Fluids. IEEE Transactions on Magnetics, 2020, 56, 1-4.	1.2	4
24	Robust adaptive least squares polynomial chaos expansions in highâ€frequency applications. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2020, 33, e2725.	1.2	10
25	A Coupled Aâ€“H Formulation for Magneto-Thermal Transients in High-Temperature Superconducting Magnets. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-11.	1.1	38
26	Quasi-3D Discretization of Thermal Hot-Spot Propagation in Superconducting Models. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.1	4
27	Robust Optimization of a Permanent-Magnet Synchronous Machine Considering Uncertain Driving Cycles. IEEE Transactions on Magnetics, 2020, 56, 1-5.	1.2	2
28	Improved air gap permeance model to characterise the transient behaviour of electrical machines using <scp>magnetic equivalent circuit</scp> method. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2020, 33, e2749.	1.2	12
29	Thermal Instability Analysis of Station Class Surge Arresters Based on Electrothermal Finite Element Simulation. Lecture Notes in Electrical Engineering, 2020, , 118-130.	0.3	2
30	Proper Generalized Decomposition of Parameterized Electrothermal Problems Discretized by the Finite Integration Technique. IEEE Transactions on Magnetics, 2019, 55, 1-4.	1.2	7
31	Automated netlist generation for 3D electrothermal and electromagnetic field problems. Journal of Computational Electronics, 2019, 18, 1306-1332.	1.3	3
32	Multirate PWM balance method for the efficient field-circuit coupled simulation of power converters. Journal of Mathematics in Industry, 2019, 9, .	0.7	1
33	Load balanced 2D and 3D adaptive mesh refinement in OpenFOAM. SoftwareX, 2019, 10, 100317.	1.2	34
34	Modeling coherent synchrotron radiation with a discontinuous Galerkin time-domain method. Journal of Computational Physics, 2019, 394, 745-758.	1.9	1
35	Numerical analysis of a folded superconducting coaxial shield for cryogenic current comparators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 922, 134-142.	0.7	3
36	Electrothermal Optimization of Field Grading Systems of Station Class Surge Arresters. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2019, 4, 29-36.	1.4	8

#	Article	IF	Citations
37	Influence of spatial dispersion on surface plasmons, nanoparticles, and grating couplers. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 2989.	0.9	10
38	Optimization and uncertainty quantification of gradient index metasurfaces [Invited]. Optical Materials Express, 2019, 9, 892.	1.6	14
39	ASSESSING THE PERFORMANCE OF LEJA AND CLENSHAW-CURTIS COLLOCATION FOR COMPUTATIONAL ELECTROMAGNETICS WITH RANDOM INPUT DATA. , 2019, 9, 33-57.		14
40	An efficient steady-state analysis of the eddy current problem using a parallel-in-time algorithm. , 2019, , .		0
41	Isogeometric analysis and harmonic statorâ€“rotor coupling for simulating electric machines. Computer Methods in Applied Mechanics and Engineering, 2018, 334, 40-55.	3.4	16
42	Adjoint Technique for Sensitivity Analysis of Coupling Factors According to Geometric Variations. IEEE Transactions on Magnetics, 2018, 54, 1-4.	1.2	9
43	Modal analysis of the ultrahigh finesse Haroche QED cavity. New Journal of Physics, 2018, 20, 043058.	1.2	1
44	Highâ€dimensional uncertainty quantification for an electrothermal field problem using stochastic collocation on sparse grids and tensor train decompositions. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2018, 31, e2222.	1.2	3
45	Multiscale and macroscopic modeling of magnetoâ€elastic behavior of soft magnetic steel sheets. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2018, 31, e2255.	1.2	3
46	Non-Linear Eigenmode Computations for Conducting and Superconducting Cavities With a Surface Impedance Boundary Condition. IEEE Transactions on Magnetics, 2018, 54, 1-4.	1.2	3
47	Nonlinear three-port magnetic-circuit elements for simulating bending magnets. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2018, 37, 266-279.	0.5	2
48	Microphonic detuning induced coupler kick variation at LCLS-II. Journal of Physics: Conference Series, 2018, 1067, 032015.	0.3	1
49	Robust shape optimization of electric devices based on deterministic optimization methods and finite-element analysis with affine parametrization and design elements. Electrical Engineering, 2018, 100, 2635-2647.	1.2	10
50	Robust optimisation formulations for the design of an electric machine. IET Science, Measurement and Technology, 2018, 12, 939-948.	0.9	9
51	Systems of Differential Algebraic Equations in Computational Electromagnetics. Differential-algebraic Equations Forum, 2018, , 123-169.	0.6	8
52	Sensitivity of Lumped Parameters to Geometry Changes in Finite Element Models. Mathematics in Industry, 2018, , 35-42.	0.1	0
53	Novel Iterative Algorithm for the Solution of Electromagnetic Scattering From Layered Random Rough Surfaces. IEEE Transactions on Antennas and Propagation, 2018, 66, 3810-3815.	3.1	4
54	Modelling and Simulation of Electrically Controlled Droplet Dynamics. Mathematics in Industry, 2018, , 101-109.	0.1	0

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55	A defect corrected finite element approach for the accurate evaluation of magnetic fields on unstructured grids. Journal of Computational Physics, 2017, 335, 688-699.	1.9	4
56	Electrohydrodynamic simulation of electrically controlled droplet generation. International Journal of Heat and Fluid Flow, 2017, 64, 120-128.	1.1	27
57	Quasi-3-D Finite-Element Method for Simulating Cylindrical Induction-Heating Devices. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2017, 2, 134-141.	1.4	5
58	Determination of Original Nondegraded and Fully Degraded Magnetic Characteristics of Material Subjected to Laser Cutting. IEEE Transactions on Industry Applications, 2017, 53, 4242-4251.	3.3	20
59	Optimizing the inductance cancellation behavior in an EMI filter design with the help of a sensitivity analysis. , 2017, , .		3
60	Uncertainty Quantification for a Permanent Magnet Synchronous Machine with Dynamic Rotor Eccentricity. Mathematics in Industry, 2017, , 493-499.	0.1	0
61	Reducing Losses Due to Fringing Flux in an Axial-Flux Permanent-Magnet Synchronous Machine. IEEE Transactions on Magnetics, 2016, 52, 1-8.	1.2	6
62	Design, simulation and use of an energy harvester based on a permanent magnet synchronous generator. , 2016, , .		0
63	Investigation of Thermal Stability for a Station Class Surge Arrester. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2016, 1, 120-128.	1.4	9
64	Automatic generation of equivalent electrothermal SPICE netlists from 3D electrothermal field models. , 2016, , .		1
65	Magnetic hysteresis at the domain scale of a multi-scale material model for magneto-elastic behaviour. Journal of Magnetism and Magnetic Materials, 2016, 414, 168-179.	1.0	23
66	Finite-element simulation of the performance of a superconducting meander structure shielding for a cryogenic current comparator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 840, 77-86.	0.7	1
67	Nanoelectronic COupled problems solutions - nanoCOPS: modelling, multirate, model order reduction, uncertainty quantification, fast fault simulation. Journal of Mathematics in Industry, 2016, 7, .	0.7	8
68	Balancing modeling and discretization errors in the numerical approximation of magnetostatic fields with uncertainties. , 2016, , .		0
69	Electroquasistatic-Thermal Modeling and Simulation of Station Class Surge Arresters. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	19
70	Determination of Original Nondegraded and Fully Degraded Magnetic Properties of Material Subjected to Mechanical Cutting. IEEE Transactions on Industry Applications, 2016, 52, 2297-2305.	3.3	24
71	Quasi-3-D Finite-Element Method for Cylindrically Symmetric Models With Small Eccentricities. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	3
72	Isogeometric simulation of Lorentz detuning in superconducting accelerator cavities. Computer Physics Communications, 2016, 201, 1-7.	3.0	17

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73	Broadband SIBC Formulation for a Low-Dispersion Finite Volume Method in the Time Domain. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	3
74	Response Surface Models for the Uncertainty Quantification of Eccentric Permanent Magnet Synchronous Machines. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	7
75	Electrothermal Simulation of Bonding Wire Degradation under Uncertain Geometries. , 2016, , .		6
76	Epstein frame measurement based determination of original non-degraded and fully degraded magnetic characteristics of material submitted to laser cutting. , 2015, , .		13
77	Epstein frame measurement based determination of original non-degraded and fully degraded magnetic properties of material submitted to mechanical cutting. , 2015, , .		3
78	Uncertainty Quantification and Sensitivity Analysis in Electrical Machines With Stochastically Varying Machine Parameters. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	24
79	An adjoint approach for uncertainty quantification of magnetoquasistatic field problems. , 2015, , .		0
80	Isogeometric Analysis simulation of TESLA cavities under uncertainty. , 2015, , .		0
81	Grain scale hysteresis model embedded in a multi-scale material model. , 2015, , .		2
82	Embedding a Magnetoelastic Material Model in a Coupled Magnetomechanical Finite-Element Solver. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	4
83	Optimization of a Sternâ€“Gerlach Magnet by Magnetic Fieldâ€“Circuit Coupling and Isogeometric Analysis. IEEE Transactions on Magnetics, 2015, 51, 1-7.	1.2	9
84	Accurate Multipole Field Reconstruction Methods Based on 3-D Electromagnetic Field Simulation Results. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	2
85	3-D Eddy Current and Fringing-Flux Distribution in an Axial-Flux Permanent-Magnet Synchronous Machine With Stator in Laminated Iron or SMC. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	17
86	Multi-rate time integration for coupled electrical and thermal modeling of surge arresters. , 2015, , .		1
87	Measurement of the magnetic material properties for ferrite-loaded cavities. Physical Review Special Topics: Accelerators and Beams, 2015, 18, .	1.8	5
88	Space charge and resistive wall impedance computation in the frequency domain using the finite element method. Physical Review Special Topics: Accelerators and Beams, 2015, 18, .	1.8	16
89	Losses due to transverse flux in axial flux permanent magnet synchronous machines. , 2014, , .		0
90	Improved field postâ€processing for a Sternâ€“Gerlach magnetic deflection magnet. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2014, 27, 472-484.	1.2	3

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91	Finiteâ€element discretisation of the eddyâ€current term in a 2D solver for radially symmetric models. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2014, 27, 505-516.	1.2	4
92	Physiological constraints for an intraocular inductive distance sensor. , 2014, 2014, 646-9.		1
93	Extended Brauer model for ferromagnetic materials: analysis and computation. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2014, 33, 1251-1263.	0.5	4
94	Nonlinear Magnetostatic Finite-Element Formulation for Models With Radial Symmetry. IEEE Transactions on Magnetics, 2014, 50, 85-88.	1.2	3
95	Finite-Element Modeling of Magnetic Material Degradation Due to Punching. IEEE Transactions on Magnetics, 2014, 50, 745-748.	1.2	71
96	Two-Dimensional Magnetostatic Finite-Element Simulation for Devices With a Radial Symmetry. IEEE Transactions on Magnetics, 2014, 50, 1-4.	1.2	10
97	Mimetic discretization and higher order time integration for acoustic, electromagnetic and elastodynamic wave propagation. Journal of Computational and Applied Mathematics, 2014, 259, 65-76.	1.1	4
98	Damped longâ€term hostâ€“parasite Red Queen coevolutionary dynamics: a reflection of dilution effects?. Ecology Letters, 2013, 16, 1455-1462.	3.0	32
99	Quantification of Uncertainty in the Field Quality of Magnets Originating from Material Measurements. IEEE Transactions on Magnetics, 2013, 49, 2367-2370.	1.2	18
100	Winding functions in transient magnetoquasistatic field-circuit coupled simulations. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2013, 32, 2063-2083.	0.5	49
101	Intraocular electro-optic lens with ciliary muscle controlled accommodation. , 2013, 2013, 3190-3.		4
102	Design of a Strong Gradient Magnet for the Deflection of Nanoclusters. IEEE Transactions on Applied Superconductivity, 2012, 22, 3700604-3700604.	1.1	5
103	Finite-Element Supported Transmission-Line Models for Calculating High-Frequency Effects in Machine Windings. IEEE Transactions on Magnetics, 2012, 48, 787-790.	1.2	26
104	Three-Dimensionalâ€“Two-Dimensional Coupled Model for Eddy Currents in Laminated Iron Cores. IEEE Transactions on Magnetics, 2012, 48, 815-818.	1.2	21
105	Higher-Order Cosimulation of Field/Circuit Coupled Problems. IEEE Transactions on Magnetics, 2012, 48, 535-538.	1.2	8
106	Multirate Time Integration of Field/Circuit Coupled Problems by Schur Complements. Mathematics in Industry, 2012, , 243-251.	0.1	7
107	Hybrid Formulations and Discretisations for Magnetoquasistatic Models. Mathematics in Industry, 2012, , 93-105.	0.1	0
108	Decomposition and regularization of nonlinear anisotropic curlâ€curl DAEs. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2011, 30, 1701-1714.	0.5	18

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109	Spectral Stochastic Simulation of a Ferromagnetic Cylinder Rotating at High Speed. IEEE Transactions on Magnetics, 2011, 47, 1182-1185.	1.2	6
110	Simulation of wave propagation effects in machine windings. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2010, 29, 23-38.	0.5	16
111	Eddy-current formulation for constructing transmission-line models for machine windings. EPJ Applied Physics, 2010, 49, 31101.	0.3	6
112	Combined Spectral-Element, Finite-Element Discretization for Magnetic-Brake Simulation. IEEE Transactions on Magnetics, 2010, 46, 3520-3523.	1.2	11
113	Block-Preconditioning for Hybrid Discretizations in Combination With Lagrange-Multiplier Coupling. IEEE Transactions on Magnetics, 2010, 46, 3397-3400.	1.2	0
114	A Cosimulation Framework for Multirate Time Integration of Field/Circuit Coupled Problems. IEEE Transactions on Magnetics, 2010, 46, 3233-3236.	1.2	40
115	Study of electron transport in a compact storage ring after interaction with target materials. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 3533-3538.	0.6	0
116	Spectral stochastic simulation of a ferromagnetic cylinder rotating at high speed. , 2010, , .		0
117	DAE-Index and Convergence Analysis of Lumped Electric Circuits Refined by 3-D Magnetoquasistatic Conductor Models. Mathematics in Industry, 2010, , 341-348.	0.1	6
118	Transient 3D Finite Element Simulations of the Field Quality in the Aperture of the SIS-100 Dipole Magnet. IEEE Transactions on Applied Superconductivity, 2009, 19, 1162-1166.	1.1	3
119	Accounting for End Effects When Calculating Eddy Currents in Thin Conductive Beam Tubes. IEEE Transactions on Magnetics, 2009, 45, 1040-1043.	1.2	2
120	Modeling Thin Conductive Sheets Using Shell Elements in Magnetoquasistatic Field Simulations. IEEE Transactions on Magnetics, 2009, 45, 1292-1295.	1.2	9
121	Magnetostatic Formulation With Hybrid Finite-Element, Spectral-Element Discretizations. IEEE Transactions on Magnetics, 2009, 45, 1136-1139.	1.2	4
122	Spectralâ€element method for highâ€speed rotating cylinders. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2009, 28, 730-740.	0.5	12
123	Construction of Differential Material Matrices for the Orthogonal Finite-Integration Technique With Nonlinear Materials. IEEE Transactions on Magnetics, 2008, 44, 710-713.	1.2	19
124	Hierarchical FIT/FE Discretization for Dielectric Subcell Interfaces. IEEE Transactions on Magnetics, 2008, 44, 706-709.	1.2	2
125	3-D Nonlinear Magnetostatic Simulation of a Superconductive Magnet Using a Higher-Order Finite-Element Code. IEEE Transactions on Magnetics, 2008, 44, 1310-1313.	1.2	1
126	Hybrid Finite-Element, Spectral-Element Discretization for Translatory Symmetric Model Parts. IEEE Transactions on Magnetics, 2008, 44, 722-725.	1.2	4

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127	Mixed-Integer Nonlinear Design Optimization of a Superconductive Magnet With Surrogate Functions. IEEE Transactions on Magnetics, 2008, 44, 1110-1113.	1.2	3
128	Adaptive Time Stepping for Electromagnetic Models With Sinusoidal Dynamics. IEEE Transactions on Magnetics, 2008, 44, 1262-1265.	1.2	5
129	Simulation of the insulation properties of a HVDC transformer using a hybrid discretization based on finite elements and harmonic functions. Electrical Engineering, 2008, 90, 331-336.	1.2	5
130	Transient 3D Finite Element Simulations of the SIS100 Magnet Considering Anisotropic, Nonlinear Material Models for the Ferromagnetic Yoke. IEEE Transactions on Applied Superconductivity, 2008, 18, 1601-1604.	1.1	6
131	A stator coil model for studying high-frequency effects in induction motors. , 2008, , .		4
132	Transmission-line modelling of wave propagation effects in machine windings. , 2008, , .		4
133	Transient Finite-Element Simulation of the Eddy-Current Losses in the Beam Tube of the SIS-100 Magnet During Ramping. IEEE Transactions on Applied Superconductivity, 2008, 18, 1613-1616.	1.1	7
134	Adaptive time integration for electromagnetic models with sinusoidal excitation. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2008, 27, 122-132.	0.5	2
135	Exploiting partial symmetries in 3D magnetostatic calculations using a scalar potential formulation. , 2008, , .		0
136	Hybrid discretisation methods. , 2008, , .		0
137	Hybrid finite-element method for discretising cylindrically symmetric parts in electrotechnical models. IET Science, Measurement and Technology, 2007, 1, 6-11.	0.9	6
138	Transient calculation of the induced currents inside the brain during magnetic stimulation. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2007, 26, 910-921.	0.5	5
139	Optimised electromagnetic 3D field solver for frequencies below the first resonance. IET Science, Measurement and Technology, 2007, 1, 53-56.	0.9	9
140	Differential material matrices for the finite integration technique. EPJ Applied Physics, 2007, 39, 165-169.	0.3	2
141	Taking Advantages of Translatory Symmetric Parts in Electromagnetic Models. , 2007, , .		0
142	A network model for inverter-fed induction-motor drives. , 2007, , .		3
143	Nonlinear multi-harmonic finite-element simulation of a capacitor motor. EPJ Applied Physics, 2007, 39, 159-163.	0.3	0
144	Large-Scale Calculation of Low-Frequency-Induced Currents in High-Resolution Human Body Models. IEEE Transactions on Magnetics, 2007, 43, 1693-1696.	1.2	6

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145	Algebraic Multigrid for Implicit Rungeâ€“Kutta Discretizations of the Eddy Current Problem. IEEE Transactions on Magnetics, 2007, 43, 1265-1268.	1.2	1
146	Transient Field-Circuit Coupled Models with Switching Elements for the Simulation of Electric Energy Transducers. Mathematics in Industry, 2007, , 25-39.	0.1	2
147	Transient Simulation of a Linear Actuator Discretized by the Finite Integration Technique. Mathematics in Industry, 2007, , 281-286.	0.1	1
148	Newton and Approximate Newton Methods in Combination with the Orthogonal Finite Integration Technique. Mathematics in Industry, 2007, , 275-280.	0.1	0
149	Transient Field-Circuit Coupled Models of Electrical Actuators. , 2006, , .		1
150	Simulation of Eddy-Current Losses in a Fast Ramped Superconductive Dipole Magnet. IEEE Transactions on Applied Superconductivity, 2006, 16, 334-337.	1.1	6
151	Modeling of Lossy Curved Surfaces in 3-D FIT/FDTD Techniques. IEEE Transactions on Antennas and Propagation, 2006, 54, 3490-3498.	3.1	16
152	Interpolation technique for effective determination of switching time instants for fieldâ€circuit coupled problems with switching elements. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2006, 25, 64-70.	0.5	3
153	Eccentric airâ€gap element for transient finiteâ€element machine simulation. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2006, 25, 344-356.	0.5	5
154	Trigonometric interpolation at sliding surfaces and in moving bands of electrical machine models. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2006, 25, 31-42.	0.5	9
155	Slidingâ€surface interface conditions for 3D machine models discretised by the finite integration technique. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2006, 25, 427-439.	0.5	1
156	Efficient calculation of current densities in the human body induced by arbitrarily shaped, low-frequency magnetic field sources. Journal of Computational Physics, 2006, 214, 81-95.	1.9	17
157	A vector Preisach model combined with a Newtonâ€“Raphson method for transient magnetic field computations. Physica B: Condensed Matter, 2006, 372, 369-372.	1.3	1
158	Application of a computationally efficient air-gap element within the finite element analysis of magnetic bearings. IEEE Transactions on Magnetics, 2006, 42, 1263-1266.	1.2	10
159	Local grid refinement for low-frequency current computations in 3-D human anatomy models. IEEE Transactions on Magnetics, 2006, 42, 1371-1374.	1.2	18
160	Integration over discontinuities in field-circuit coupled simulations with switching elements. IEEE Transactions on Magnetics, 2006, 42, 1031-1034.	1.2	5
161	Modelling of lossy curved surfaces in the 3-D frequency-domain finite-difference methods. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2006, 19, 421-431.	1.2	2
162	Transient Field-Circuit Coupled Models of Electrical Actuators. , 2006, , .		0

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163	Embedded Runge-Kutta methods for field-circuit coupled problems with switching elements. IEEE Transactions on Magnetics, 2005, 41, 1612-1615.	1.2	19
164	An effective reluctivity model for nonlinear and anisotropic materials in time-harmonic finite element computations. IEEE Transactions on Magnetics, 2005, 41, 1508-1511.	1.2	6
165	Solution of transient hysteretic magnetic field problems with hybrid Newton-polarization methods. IEEE Transactions on Magnetics, 2005, 41, 1720-1723.	1.2	4
166	A computationally efficient air-gap element for 2-D FE machine models. IEEE Transactions on Magnetics, 2005, 41, 1844-1847.	1.2	13
167	Using domain decomposition techniques for the calculation of lowâ€frequency electric current densities in highâ€resolution 3D human anatomy models. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2005, 24, 458-467.	0.5	10
168	Impact of the displacement current on low-frequency electromagnetic fields computed using high-resolution anatomy models. Physics in Medicine and Biology, 2005, 50, N243-N249.	1.6	33
169	Efficient modelling techniques for complicated boundary conditions applied to structured grids. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2004, 23, 904-912.	0.5	7
170	Finite-Element Models for Superconductive Cables With Finite Interwire Resistance. IEEE Transactions on Magnetics, 2004, 40, 667-670.	1.2	9
171	Transient Electro-Quasistatic Adaptive Simulation Schemes. IEEE Transactions on Magnetics, 2004, 40, 1294-1297.	1.2	24
172	Fieldâ€“circuit coupled models in electromagnetic simulation. Journal of Computational and Applied Mathematics, 2004, 168, 125-133.	1.1	36
173	Harmonic Weighting Functions at the Sliding Interface of a Finite-Element Machine Model Incorporating Angular Displacement. IEEE Transactions on Magnetics, 2004, 40, 545-548.	1.2	30
174	Field-Circuit Coupling for Time-Harmonic Models Discretized by the Finite Integration Technique. IEEE Transactions on Magnetics, 2004, 40, 1334-1337.	1.2	23
175	Transient fieldâ€circuit coupled formulation based on the finite integration technique and a mixed circuit formulation. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2004, 23, 968-976.	0.5	9
176	Comparison of slidingâ€surface and movingâ€band techniques in frequencyâ€domain finiteâ€element models of rotating machines. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2004, 23, 1006-1014.	0.5	10
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